

ATTACHMENT A

Remarks

Claims 1-6 are pending in the present application. By this Amendment, Applicant has added new claim 6. Applicant respectfully submits that the present application is in condition for allowance based on the discussion which follows.

Claims 1-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Lilja et al. (hereinafter "Lilja") and under 35 U.S.C. § 103(a) as being obvious over Lilja in view of Haack.

Contrary to the prior art rejections of the claims, the present invention is directed to a novel and non-obvious method in view of the prior art which, individually or in combination, fails to teach or suggest all claim elements. In particular, the prior art, individually or in combination with each other, fails to teach or suggest defattening a rind using steam and/or hot water. Further, Applicant respectfully submits that the Examiner has failed to make a *prima facie* case of anticipation or obviousness with regard to defattening the rind using steam and/or hot water. Furthermore, Applicant respectfully submits that Lilja fails to be an anticipatory reference of the present method as Lilja fails to enable one of ordinary skill in the art to practice the invention as claimed, namely with regard to using rind to produce gelatin.

With regard to the failure to make a *prima facie* case of anticipation and/or obviousness, Lilja, individually or in combination with Haack, fails to teach or suggest defattening a rind with hot water or steam prior to hydrolysis as claimed. Lilja only refers to an optional defattening step on page 7, lines 9-12, noting the material may be defattened prior to grinding to limit a fat content not exceeding 3% by weight. Nowhere in Lilja is there any mention of the method by which a collagen-containing raw material

is defattened, let alone defattened by using hot water or steam. However, what is clear from Lilja is that since the defattening step is listed as an optional additional step, clearly Lilja's step of mixing of the ground collagen-containing raw material with water to form a slurry is not a defattening step. Thus, Lilja fails to teach or suggest a defattening step with hot water or steam prior to forming a slurry which is then treated with an acid in a hydrolysis step. Therefore, Lilja fails to anticipate or make obvious the present method.

Moreover, as discussed in the prior Amendment of November 9, 2005, although Haack teaches a process for forming gelatin from pork rinds which are defattened mechanically, the yield of defattened rind is about 60%. However, using the present method of steam or hot water to defatten the rind produces a more complete removal of fat from the rind. The more complete removal of fat allows more of the rind to be hydrolyzed by the acid, thus allowing a higher yield of gelatin product.

Nowhere in Haack or in Lilja is there any suggestion to motivate one of ordinary skill in the art to use hot water or steam in a method to defatten the rind prior to hydrolysis, which thereby surprisingly results in a superior production of gelatin. Furthermore, as discussed in the Remarks to the November 9, 2005 Amendment, the present method results in a more uniform product, using the claimed defattening step to which Haack is completely silent with regard to its gelatin yield or uniformity/quality of gelatin obtained.

Furthermore, it would not be obvious to modify the methods of the prior art to make the claimed invention obvious. Lilja admits that the defattening step is not critical (Lilja, page 7, lines 9-12). And, the Haack article, representing the state of the art, teaches using mechanical defattening, which, as previously discussed, produces a rind

for the production of gelatin which is inferior. There fails to be any suggestion to modify these teachings to incorporate a hot water or steam defatting step.

Moreover, the Lilja reference fails to be an enabling reference to anticipate the present invention in accordance with Elan Pharm Inc. v. Mayo Found., 68 U.S.P.Q.2d 1373 (Fed.Cir. 2003). In order to be an anticipatory reference, the reference must enable one of ordinary skill in the art to make or carry out the claimed invention without undue experimentation. Lilja is not an anticipatory reference as one of ordinary skill in the art would not be able to practice the claimed invention without undue experimentation necessary in order to use rind as a collagen-containing starting material. Lilja is silent as to how one would use or modify its method for use with rind as a starting collagen-containing material. For example, there are major differences between the Lilja disclosed non-rind, collagen-containing starting material, and rind. Even though Lilja suggests rind can be used as a collagen-containing starting material, due to physical and chemical differences between rind and the materials actually used in its method, rind cannot be used with the Lilja disclosed method without modifying the method to accommodate the differences between rind and the other disclosed collagen-containing materials.

The Lilja method was developed for producing gelatin from bones. Therefore, its method includes processing steps directed to accommodate this material, not for producing gelatin from rind. The properties and characteristics of bones and rinds are quite different. Where bone is a hard and non-compressible material, and thus easy to process and separate into various fractions, rind is rather soft in structure, and the components thereof have the same density and are thus difficult to separate, which is

critical during the gelatin process. If one, following the Lilja teaching, had attempted to carry out the Lilja suggested method of using rind as a starting material, one of ordinary skill in the art would have realized that from the Lilja teaching, it is not feasible to produce gelatin from rind on an industrial scale (i.e. sufficient yield and quality) due to the differences between bone and rind. In order to use rind to produce an industrial scale gelatin product, the Lilja method must be modified to use of rind as a starting material. Two major changes would have to be made:

1. The raw material would have to be cut into pieces not less than 1 mm; and
2. The defattening should be carried out using water or steam.

With regard to the first modification, although Lilja clearly teaches cutting the collagen-containing material to less than 1 mm or preferably a size of 0.3 mm, in order to adequately defatten the rind, the rind needs to be cut into pieces greater than 1.0 mm. Nowhere does Lilja teach or suggest a collagen-containing material size larger than 1.0 mm. However, as the present specification discloses, with material containing fat such as rind, defattening pieces smaller than 1.0 mm is difficult due to the fact that a stable emulsion will come out, making it difficult to separate the fat from the emulsion, thus creating problems in the production of gelatin. Nowhere in the disclosure of Lilja is there any mention that one should modify the size of the particle of the starting material to accommodate the use of a rind as the collagen-containing material. It would take undue experimentation in order to realize that the starting material size needs to be larger than the disclosed size in order for the method to be successfully used with rind as a starting material. Thus, Lilja fails to be enabling of the presently claimed method and, therefore, not an anticipatory reference.

With regard to the second modification, namely that the defattening should be carried out using hot water or steam as discussed above, in order to produce a sufficient yield and quality of gelatin, the present novel and non-obvious method includes a step of defattening the rind using hot water or steam. Absent this defattening method, the yield and quality will be insufficient.

Furthermore, a comparison between the Bloom number and the yield of gelatin product obtained by the Lilja method and the properties of the gelatin product obtained by the method of the present invention is not relevant since the raw materials used are quite different. Lilja does not include an example of gelatin produced from rind. Since the raw material used by Lilja is different than the raw material used by the present invention and the method is different, the Lilja patent does not anticipate the present invention.

Based on the foregoing, Applicant respectfully submits that claims 1-5 are not anticipated by or obvious in view of Lilja, individually or in combination with Haack.

By this Amendment, Applicant has added new claim 6, dependent from claim 1, further defining the chopping and cutting step to recite that the cutting or chopping step is conducted by chopping or cutting a rind into pieces not less than 1 mm. The prior art, including Lilja, failed to teach or suggest such a step. To the contrary, Lilja actually teaches away from the recited less than 1 mm size as Lilja clearly discloses cutting the collagen-containing material to less than 1 mm and, preferably, to a size of 0.3 mm. Accordingly, Applicant respectfully submits that claim 6 is further not anticipated or obvious in view of the prior art and, therefore, in condition for allowance.

In view of the foregoing, Applicant respectfully submits that the present application is in condition for allowance.